

CONTRACTING FOR A & E SERVICES

CLASSROOM EXERCISES

FEDERAL ACQUISITION INSTITUTE

CURRICULUM OF PROCUREMENT
TRAINING COURSES

CURRENT THROUGH
FAC 90-37

OFFICE OF ACQUISITION POLICY

GENERAL SERVICES ADMINISTRATION

INTRODUCTION

"Team Dynamics Exercise"

The objective of this exercise is to establish ground rules and operating procedures to be followed by your team.

Directions: Assign roles to team members and name your team.

Identify a facilitator_____

The facilitator acts as the team leader and is responsible for keeping the team focused on the objective.

Identify a recorder_____

The recorder keeps the team's notes and is responsible for preparing the team's written assignment when required.

Identify a time keeper _____

The time keeper is responsible for the time being spent by the team.

Identify a spokesperson for each day of the week:

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

The spokesperson responds for the team and makes presentations.

Give your team a one word name: _____

Put team name and list of spokespersons with day of the week on flip chart.

Dear Student:

This week, you will receive training as a Contract Specialist, GS-1102, in A-E contracting procedures. You will be involved in a hypothetical procurement for a cafeteria design.

You will perform the following contracting for A-E services duties and tasks to procure a cafeteria design.

1. Select methodology for acquiring A-E services.
2. Forecast A-E requirements.
3. Determine if Brooks Act applies.
4. Conduct market research for qualified A-E firms.
5. Develop A-E acquisition plan.
6. Develop synopsis scope of work.
7. Review SF 254s and 255s.
8. Prepare selection report.
9. Prepare RFP using SF 252 and A-E specific clauses.
10. Evaluate A-E proposal.
11. Administer A-E contract .
12. Determine 6% fee limitation after change order.
13. Evaluate Performance Evaluation SF 1421.

At the completion of this course, you will be given a closed book exam. The exam will contain multiple choice and true/false questions. The test questions are derived from the Text Reference learning objectives which appear on page 2 of each chapter of the Text / Reference. Performing the classroom exercises will help you understand the materials in the Text / Reference and prepare you for the test. You should not assume you can pass the test without participating in class and completing the reading assignments. Certificates will be provided to students who have attended class, participated in the class exercises, and passed the closed book exam.

LESSON PLAN

A-E PROCEDURES

CHAPTER 1

TIME	LESSON	OBJECTIVES
8:00 - 9:00	Introduction to Course	
9:00 - 9:30	1.0 Introduction to A-E Procedures	
9:30 - 9:50	B R E A K	
9:50 - 10:30	1.1 Review of Government Procurement Procedures	<p>Describe difference between contracting for regular services and A-E services.</p> <p>Describe basic premise of Government procurement.</p> <ul style="list-style-type: none"> • Minimum need. • Maximum competition. • Open market.
10:30 - 11:30	1.2 Procurement of Professional Services	<p>Describe basic premise of contracting for Professional services.</p> <ul style="list-style-type: none"> • Professionals selected for judgment and expertise. • Price not a consideration in the selection process. • The traditional method. • Other methods.
11:30 - 12:30	L U N C H	
12:30 - 1:25	1.2 (Continued)	
1:25 - 3:00	Exercise 1.2 & BREAK	
3:00 - 3:15	1.3 Legislative History of the Brooks Act	<ul style="list-style-type: none"> • Public Works Act of 1939. • Federal Property and Administrative Services Act of 1949. • Brooks Act of 1972.
3:15 - 3:30	1.4 Forecasting Requirements for A-E Services	
3:30 - 4:30	Questions & Reading	

LESSON PLAN
A-E PROCEDURES

CLASSROOM EXERCISE CE-1.2

"THE BIG DECISION"

Time: 75 minutes

Method:	Group Work	45 minutes
	Spokesperson Makes Presentation	30 minutes

Instructions:

Your instructor will assign to your group one of the scenarios printed on the following pages. Using the materials from your Text/Reference (pages 1-10 to 1-17) and the information from the lecture which was provided by your instructor on the various means of executing a request for procurement of architectural engineering services, the group is to arrive at a consensus of how they would approach the procurement based on the information provided in the scenario, i.e.

- By the traditional method of procurement.
- By the Contract Management contract.

(If this method is chosen, detail how much of the requirement would be delegated to a contract manager, i.e., the design only, construction only, or both).

- The Design-Build method.
- The Turnkey method.
- By issuing a delivery order against an existing IQ contract.

Once the group has established what their position is going to be, the spokesperson transfers it to a flip chart and prepares a presentation to the class on their position, relating the rationale for the decision.

Once your scenario solution is prepared, the group should proceed to read the other scenarios and reach a consensus on a methodology so that you will be prepared to ask questions and discuss all of the scenarios solutions as they are presented.

CLASSROOM EXERCISE CE-1.2

DAMMING THE MISSISSIPPI

The Government has a requirement to design a multi-million dollar dam to harness future flood waters on the Mississippi. Due to the past summer's floods which caused huge monetary losses, there is a great deal of pressure to get this dam built at the earliest date. Congress will be very impatient with delays. Money is also a problem. Congress has also indicated that once the design has been finished and approved, money for the construction will be made available on an incremental basis. The project will require precise cost estimating, and will require expertise in management techniques to assure its timely completion.

"ALL THE WORLD'S A STAGE"

The Government has submitted to your office a request for design services to build a theater. The theater is to be state of the art, as to sounds and acoustics. It will be fashioned to seat 500 people comfortably, and designed in such manner as to provide an uninterrupted view of the elevated stage. The project is the "pet" of the head of design who is already pressuring to award as soon as possible without all of "those unnecessary procurement steps that contract specialists have to go through." The estimated cost of construction is 4.2 million.

A "FIXER - UPPER"

The Government has an urgent need to rehabilitate and renovate a structure currently used as storage, to convert it into a mechanical garage which will be used to repair vehicles. Using the present concrete slab, the design will include that of a hydraulic grease rack, as well as storage cabinets along the walls of two sides which can be locked. The project is estimated to cost (ECC) \$250,000. There is currently an Indefinite Quantity plumbing/heating contract in place to be used for such small jobs. Your boss has agreed to obtain design as fast as possible in order to meet the customer's required deadline.

CLASSROOM EXERCISE CE-1.2

"THE HOT POTATO"

The Government has issued a need for some environmental site clean up. The project itself, carries a high priority. It is a project that has been on the back burner for years, and has suddenly become a "hot potato". Not many details are available. The design portion consists of identification of contaminants and recommendation as to clean up methods and procedures. Accurate estimates of costs are required, as well as research as to the state of the art in cleanup methods and procedures on this type work. Once the Government reviews and approves the design, a contract will be let for clean up using the designer's specifications. Although there is usually an indefinite quantity design contract in place, your office has not awarded the new one. The contract specialist who is working on that contract states that it will be approximately 60 to 90 days before it will be in place. The A-E fee is estimated to be no more than \$125,000.

"HOME SWEET HOME"

The Government has submitted a procurement request for a 300 unit housing development. The request states that they want the contractor to finance, design and build the housing units. When the buildings are completed and accepted, the Government wishes to lease each unit from the contractor for a period of 20 years. The contractor will manage, and maintain the houses during this period. The housing units will consist of two and three bedrooms with a minimum of two bathrooms in each structure. The houses will be constructed on land selected and belonging to the contractor but must be located no more than 10 miles from the nearest Army base. Completion time is important, but not considered critical. The Government would also like to approve the design prior to construction, and would like to approve of the subcontractors to be employed on the construction contract.

CHAPTER 1 VIEWGRAPHS

A-E v. OTHER CONTRACTING

- | | |
|--------------------|-----------------|
| 1. PUBLIC LAWS | 8. SOLICITATION |
| 2. WAGE RATES | 9. BONDS |
| 3. SOURCES | 10. PRICING |
| 4. SYNOPSIS | 11. SELECTION |
| 5. OFFER FORMS | 12. AWARD FORM |
| 6. EVALUATION | 13. WARRANTIES |
| 7. CONTR. METHOD | 14. TERMINATION |
| 15. RESPONSIBILITY | |

VG 1-1

ARCHITECT

Plans, Design, & Organizes Services for Construction of Office Buildings, Factories, Residences.

- Consults with Government.
- Consults with Others (on site or financial analysis or feasibility studies.)
- Provides Info (on cost & building time).
- Provides Concept (sketches, drawings, or specifications).

VG 1-2

ENGINEER

Term Applied to Persons who Possess:

- Educational Qualifications
- Work Experience
- Legal Certification (where required as established by engineering boards or schools, or licensing authorities.)

VG 1-3

ENGINEERING FUNCTION

- RESEARCH & DEVELOPMENT
- DESIGN
- PRODUCTION
- CONSULTING
- ADMINISTRATION & MANAGEMENT
- TECHNICAL WRITING
- TECHNICAL SERVICE

VG 1-4

TYPICAL A-E FIRM

- CLIENT RELATIONS PERSON
- PLANNERS
- CONTRACT ADMINISTRATOR
- DESIGNERS
- CIVIL ENGINEERS
- ARCHITECTURAL DRAFTERS
- ENGINEERS (STRUCTURAL, MECHANICAL, & ELECTRICAL)
- LANDSCAPE ARCHITECTS
- SPECIFICATION WRITER

VG 1-5

CONTRACTING FOR A-E SERVICES

- *TRADITIONAL*
- **CONSTRUCTION MANAGEMENT**
 - A-E and/or Construction Contractor
- DESIGN-BUILD or TURNKEY

VG 1-6

METHOD SELECTION CRITERIA

- AGENCY POLICY
- URGENCY
- ADVANTAGES v. DISADVANTAGES
- EXISTING CONTRACTS (e.g. IQ)
- AVAILABILITY of FUNDS
- POLITICAL PRESSURES

VG 1-7

TRADITIONAL

TWO CONTRACTS AWARDED

1. DESIGN

- Contract A-E under Brooks Act
- Government in-house

2. CONSTRUCTION

- IFB or Negotiated Offers

VG 1-8

TRADITIONAL

ADVANTAGES:

- Selection on Qualifications not Price
- Design Completed before Funding
- 2 Contracts Act as Check & Balance

DISADVANTAGES:

- A-E often lacks Estimating Expertise
- A-E not a Construction Expert
- Long Time Frame for Linear Process

VG 1-9

CONSTRUCTION MANAGEMENT

ADVANTAGES:

- Possesses Management Expertise.
- Prevents Inefficient Management.
- Relieves Govt. of Admin. Burden.
- Looks More Objectively at Design Ambiguities.
- May Deliver More Cost Effective Project.

VG 1-10

CONSTRUCTION MANAGEMENT

DISADVANTAGES:

- May be Lacking in Trained Personnel.
- Government May Lose Some Control.
- Less Reliance on Quality Control by Construction Contractor.
- Three Separate Entities to Deal with.

VG 1-11

DESIGN-BUILD

THREE ELEMENTS

1. Direct Interaction between A-E & Government (if desired).
2. Strong & Knowledgeable Management of Project through all Phases.
3. Short & Direct Lines of Communication between A-E, Govt. and Construction Team.

VG 1-12

DESIGN-BUILD

APPROPRIATE WHEN PROJECT:

- Is Repetitive in Nature (e.g. housing).
- Doesn't Need Detailed Govt. Input.
- Is Complex & Govt. lacks Expertise.
- Is Highly Classified.

VG 1-13

DESIGN-BUILD

ADVANTAGES:

- Price known and agreed upon initially.
- Govt. relieved of administrative burden.
- Time saved by awarding only 1 contract.
- Control kept by keeping rights to OK.
- Teamwork promoted.
- Only one entity to deal with.
- Designer & Builder on same team.
- Compatible with fast tracking.

VG 1-14

DESIGN-BUILD

DISADVANTAGES:

- Govt. may give up decision making.
- Building codes evolved Traditionally.
- Competition limited.
- Quality may be sacrificed to cost.
- No checks & balances as in Traditional.
- Difficult to trace costs to Design or Construction.

VG 1-15

TURNKEY

SIMILAR TO DESIGN-BUILD EXCEPT:

- Contractor furnishes other services such as Financing, Site Selection, and Operating the Facility.
- Govt. does not have approval rights.

Advantages & Disadvantages Similar to Design-Build.

VG 1-16

IQ CONTRACTS

ADVANTAGES:

- Time savings.
- Less administrative burden.
- Less time needed for negotiation.
- Simplified Statement of Work.
- Base year plus option for extension.
- Excellent for environmental work.
- Cost effective.

VG 1-17

IQ CONTRACTS

DISADVANTAGES:

- Not suitable for large projects.
- Estimate of need is sometimes difficult.
- Must be confined to specific type of work.
- Danger of not having the most qualified A-E for the project.

VG 1-18

PARTNERING

- STEP 1:** Establish Personal Contact, Commitment.
- STEP 2:** Approve Joint Statement of Mutual Goals.
- STEP 3:** Identify Disputes Prevention Process.
- STEP 4:** Establish Joint Workshops.

VG 1-19

PARTNERING

ADVANTAGES:

- Creates a climate which fosters success.
- Removes adversarial attitudes.
- Establishes & maintains communication.
- Promotes & fosters cooperation.
- Harnesses capabilities, talents, and positive energies of both parties.

VG 1-20

PARTNERING

DISADVANTAGES:

- Govt. and A-E may become too close.
- Contract requirements may become relaxed.
- Too much concern on relationship as opposed to getting the job done.
- Not worth the time and effort.

VG 1-21

LESSON PLAN
PLANNING
CHAPTER 2

TIME	LESSON	OBJECTIVES
8:00 - 8:30	2.0 Introduction	
8:30 - 9:00	2.1 Determine if Brooks Act Applies	<ul style="list-style-type: none"> • Definition of A-E Services. • Licensed, registered, or certified. • Incidental services. • Firms permitted by law to practice. • Decision to use-in-house assets
9:00 - 9:15	2.2 Define Roles and Identify Key Personnel	<ul style="list-style-type: none"> • Requiring Activity / User • Project Manager • Design Manager
9:15 - 9:35	B R E A K	
9:35 - 10:20	Exercise 2.2	
10:20 - 11:15	2.3 Perform Market Research	<ul style="list-style-type: none"> • Definition of market research & survey. • Collecting data from SF 254, 255 • Small Business concerns
11:15 - 12:00	Exercise 2.3	
12:00 - 1:00	L U N C H	
1:00 - 1:30	Exercise 2.3 (cont.)	
1:30 - 2:00	2.4 Choose Contract Type & Method	<ul style="list-style-type: none"> • Complexity of the project • Accurate SOW • Repetitive services
2:00 - 2:15	2.5 Develop Acquisition Plan & Milestones	<ul style="list-style-type: none"> • Definitions • Bring all variables together
2:15 - 3:45	Exercise 2.5 & BREAK	
3:45 - 4:30	Questions & Reading	

LESSON PLAN PLANNING

CLASSROOM EXERCISE CE-2.2

"THE PLAYERS"

Time: 30 minutes to prepare
20 minutes to present

Method: Group Exercise

Purpose: Enforcement of learning how the planning team members play various roles at specific times, sometimes taking the lead, and sometimes providing support. Flexibility is needed. Understanding when to play what role is necessary. Teamwork and cooperation is essential.

Introduction: The exercise is found on the following page. Note that there are two columns on the far left which are blank, and one column which describes the activity (steps) in the procurement cycle.

Instructions for Students:

At the bottom of the page there are listed typical department or division personnel which would be involved in planning an A-E procurement. Using the codes provided next to the described departments, identify in

Column #1 who has the lead in each activity, and in

Column #2 who has supportive roles.

Keep in mind that there may be more than one person who would have supporting roles, and in some instances more than one in the lead.

Also bear in mind that different agencies have different policies regarding who does what. Therefore, there probably will not be total agreement within your group. These variances should be brought out by the group appointed spokesperson at the end of the exercise during the discussion period.

Then in Column #3, after discussing within your group, put a timeframe for doing the activity.

CLASSROOM EXERCISE CE-2.2

TYPICAL ACTIVITIES REQUIRED FOR A-E CONTRACT				
ROLES:				
① RESPONSIBILITY	② SUPPORT	ACTIVITY	③ # OF DAYS	√ MILESTONE DATES
		COMPLETION OF REQUEST FOR A-E SERVICES & DEVELOP SCOPE _____		
		OBTAIN FUNDING COMMITMENT _____		
		APPROVAL OF ACQUISITION PLAN _____		
		APPROVAL TO CONTRACT FOR A-E SERVICES _____		
		DRAFT SYNOPSIS _____		
		ISSUE NOTICE TO COMMERCE BUSINESS DAILY _____		
		CBD NOTICE PRINTED _____		
		ISSUE SCOPE OF WORK & CBD NOTICE TO BOARD MEMBERS _____		
		A-E PRESELECTION BOARD CONVENES _____		
		INTERVIEWS CONDUCTED _____		
		A-E SELECTION BOARD CONVENES _____		
		APPROVAL OF SELECTION _____		
		NOTICE OF SELECTION _____		
		REQUEST FOR PROPOSAL LETTER TO A-E _____		
		REQUEST & OBTAIN FIELD PRICING SUPPORT (AUDIT) _____		
		PREPARATION & APPROVAL OF GOVERNMENT ESTIMATE _____		
		RECEIPT OF PROPOSAL _____		
		TECHNICAL ANALYSIS OF PROPOSAL _____		
		AUDIT INFO INPUT INTO PRE-NEG STRATEGY _____		
		PREPARATION OF PRE-NEGOTIATION STRATEGY _____		
		NEGOTIATION TEAM MEETING(GAME PLAN) _____		
		NEGOTIATION _____		
		PREPARATION OF PNM _____		
		REVIEW BY CONTRACT REVIEW BOARD (If required) _____		
		INCORPORATE BOARD COMMENTS (If required) _____		
		APPROVED BY DIVISION ENGINEER (If required) _____		
		APPROVED BY CONTRACTING OFFICER _____		
		REVIEW BY ENGINEERING DIVISION (DESIGN/CONSTRUCTION) (If required) _____		
		OBTAIN FUNDING _____		
		AWARD LETTER /CONTRACT _____		

	U/C	User/client	CS	Contract Specialist
	PM	Project Manager	CO	Contracting Officer
	UM	Upper Management	LO	Legal Officer
	D/C	Design/Construction		

CLASSROOM EXERCISE CE-2.3

"THE ART OF PERFORMING MARKET RESEARCH

Time: 20 minutes to prepare
20 minutes to present

Method: Group exercise

Instructions:

Read the scenario and answer the questions on the following page.

SCENARIO

Design services are required for the building of a one story small maintenance facility.

The contract amount is estimated to be under \$25,000. It will require demolition of a small existing building, including removing the foundation. (The building was built in 1926.)

Design of the new storage facility consists of providing a two part building, on one side an office, and the other side a garage facility featuring an overhead crane. The building will be rectangular and consist of concrete blocks and red tile roof with windows in the office portion only.

Unfortunately an Indefinite Quantity Contract is not available for use, as it has not yet been awarded for the year.

CLASSROOM EXERCISE CE-2.3

"THE ART OF PERFORMING MARKET RESEARCH

Analysis Form

1. Using the SF 254, determine the appropriate code for this project. _____

2. Explain how you would determine if there are sufficient numbers of A-E firms who are expected to be interested and would qualify for this procurement.

3. Calculate from the information provided the estimated cost of construction (ECC).

4. In examining the SF 254s on hand, what kind of information are you going to look for that will assure you that the contractor has the experience and expertise to perform?

5. Do you recommend that SF 255s be obtained?

6. Explain why.

Classroom Exercise CE-2.5

ACQUISITION PLAN “LEAKEYPOND USA”

Time: 60 Minutes for Preparation
30 Minutes for Presentation

Method: Group

Instruction:

Break into groups and read the scenario entitled "Leakypond USA"

From the scenario information provided, develop an acquisition plan using the sample acquisition plan outline provided. The sample provides simple explanations of the information required and blanks for providing responses.

In Section B, #7, you are to establish milestones for the various phases of the acquisition cycle, using column 4 from the form in Class Exercise 2.2. You have already determined the amount of time it takes to complete each activity. Now you must determine:

- determine which activities overlap in whole or in part,
- select those activities which can be considered “major” milestones, and
- settle on dates for each milestone.

The procurement situation presented is one in which an Indefinite Quantity contract is not a consideration.

Classroom Exercise CE-2.5

"TROUBLE AT LEAKYPOND USA"

Leakypond, California has been discharging hazardous wastes into a lagoon for the past 20 years. They were notified by the State, through their landlord, GSA, in April 20, 1992 that testing had revealed significant contamination was taking place and given an ultimatum to clean it up "or else". First, they are required to take action to define the problem they have caused and then take corrective action to cease contamination. Various Government agencies have been working with the owner of the property (GSA) for the last year helping them try to define their response. Mr. Dunn is the contact person at Leakypond.

Mr. Moore, the GSA Project Manager for the cleanup, states that detailed studies of the subsurface geology and the ground water conditions at the hazardous waste lagoon are necessary to meet the requirements of how to approach the cleanup. The study must define the nature, rate and extent of the contamination and evaluate the alternatives available to eliminate or mitigate the effects of the lagoon on ground water. The study must also provide an engineering report and a recommended course of action. The preparation of a Statement of Work for the selected remedial action alternative may also be required. It cannot be determined whether this will be necessary until after the study is made.

The design division for GSA is currently understaffed, but qualified private sector engineers are available to make the study. If the design is done in-house it would receive the same priority as the other priority requirements being worked on "in-house". Because of interference with special requirements at Leakypond, all required field work in conjunction with the studies to be performed must be completed by May, 1993. Worse yet, the State of California has notified Leakypond that they must complete the studies and initiate corrective action by the end of calendar year 1993, or they will be required to close the part of the operation that generates the waste.

Mr. McGrath, the Contracting Officer in the contracts office at GSA states that they, too, are overworked and understaffed. He would like to defer any procurement actions until after the 1st of the fiscal year (FY 94). He also reported that GSA has a severe shortage of funds this year, and the Comptroller can only find \$600,000 (at the most) to get the project started. The estimated cost which the Government has come up with is \$450,000 for the initial study, but the total project, including cleanup, will probably run about \$200,000 more, for a total of \$650,000. These costs are considered bare minimums.

There must be coordination between the State, Federal Government, Leakypond GSA and the contractor to keep this project on track. The State and Federal Government must also be given the opportunity to review and approve the work plans and interim reports. According to Dan Singles, who is head of the Engineering Department at the GSA there is a considerable amount of data available concerning the extent of the contamination in the area, and the overall geology of the general area is well understood by both the State and Federal Government. However, some specific subsurface geological information is not available.

A survey of the SF 254's on hand shows a limited number of firms who would qualify to do this highly specialized work. There is one GSA Indefinite Quantity contract currently in existence that covers studies of this type, but the dollar value exceeds the maximum allowed for any one project.

Classroom Exercise CE-2.5
FORMAT FOR THE ACQUISITION PLAN
"LEAKYPOND USA"

[NOTE: Acquisition plans are required for all acquisitions with an estimated total value of greater than \$100,000. The following format, an example used by one agency, is actually designed for use for acquisitions with a total estimated value greater than \$10,000]

=====

COVER SHEET. The cover of the acquisition plan shall identify the plan, the program it supports, the general nature and location of the work. It shall also be dated (Use October 1, 1992), and have the signatures of responsible officials in each of the elements who have significant involvement in the preparation of an acquisition plan.

=====

A. ACQUISITION BACKGROUND AND OBJECTIVES:

1. Statement of Need _____

- a. Background. (Relevant facts which lead up to the acquisition in question; other projects or work which is germane to this effort or other information which would be helpful in understanding the purpose or intent of this effort.)

- b. Objectives. (This should be a concise statement of the need that the acquisition will fulfill.)

- c. Source of Requirement. Who is the customer?

2. Applicable Conditions

- a. Constraints or Limitations. (Note any limitations on time, funds, manpower, etc. or other facts which limit alternatives.)

- b. Schedule Drivers. (When must the work start and/or finish to meet project objectives, and are there any important intermediate milestones? Give any tentative, desired or required milestones, if known.)

3. Estimated Costs. (Initially only order of magnitude, refined as possible. If known, the approximate costs of in-house, contract or other costs may be shown.)

4. Performance Objectives. (What are the criteria against which we will judge the effectiveness of the effort?)

5. Period of Performance. (How long do we have to complete the job or how long do we think it will take to complete the work?)

6. Special Reporting Requirements. (Are special or interim reports or meetings with the customer or others (e.g., EPA) required?)

7. Government Furnished Information, Equipment or Assistance (Will any significant information, equipment or assistance be provided to the contractor to the extent that this will affect the schedule or price of the task?)

B. PLAN OF ACTION

1. Proposed Acquisition Source. (In-house, contractor, small business, 8(a) set aside, supplemental agreement).

2. Competition. (Will this be a competitive or non-competitive procurement as defined in the FAR?)

☐ Yes ☐ No

3. What type of selection procedures? (Sealed Bidding, Brooks Bill, Negotiations, Source Selection, etc.)

4. What method of A-E contracting will be used? (Traditional, CM, Design-Build, etc.)

5. Proposed Contract Type.

6. Budgeting and Funding. Are funds available?

☐ Yes ☐ No

7. Acquisition Milestones. (Use Column 4 of form in Class Exercise 2.2.)

C. POINT OF CONTACT (list names, with telephone numbers).

1. Contracting Officer, Program Manager, technical branch project engineers, contract specialist, budget analyst and others as needed.

2. Customer contacts

CHAPTER 2 VIEWGRAPHS

DEFINITION OF A-E SERVICES

FAR 36.102

Professional services of an A-E nature:

1. As defined by State law, if applicable, which are required to be performed or approved by a person LICENSED, REGISTERED, OR CERTIFIED to provide such services.
2. Associated with research, planning, development, design, construction alteration, or repair of REAL PROPERTY; and
3. Or INCIDENTAL SERVICES, which members of the A-E professions (and individuals in their employ) may logically or justifiably perform.

VG 2-1

EMERGING SMALL BUSINESS

FAR 19.1002

"A small business concern whose size is no greater than 50% of the numerical size standard applicable to the Standard Industrial Classification (SIC) code assigned to a contracting opportunity."

VG 2-2

COMPETITIVENESS DEMONSTRATION PROGRAM

FAR 19.1003

PURPOSE:

- “Test the ability of small businesses to compete successfully in certain industry categories without competition being restricted by the use of small business set asides.”
- “Measure the extent to which awards are made to a new category of small businesses known as Emerging Small Businesses.”

A-E IS ONE OF THE DESIGNATED INDUSTRIES

VG 2-3

FIXED PRICE A-E CONTRACT PREFERRED

- PROVIDES MAXIMUM INCENTIVE FOR A-E TO *CONTROL COSTS*.
- MOTIVATES THE A-E TO *PERFORM EFFICIENTLY*.
- *MINIMIZES ADMINISTRATIVE BURDEN* UPON CONTRACTING PARTIES.

VG 2-4

LESSON PLAN
SELECTION PROCESS
CHAPTER 3

TIME	LESSON	OBJECTIVES
8:00 - 8:15	3.0 Introduction	
8:15 - 8:50	3.1 Develop a Detailed Scope of Work	Include all information which is needed in the synopsis.
8:50 - 9:10	3.2 Develop Synopsis Scope of Work	Include information which gives all parties a clear understanding of work to be done.
9:10 - 9:25	3.3 Develop Specific Selection Criteria	Critique selection criteria for appropriateness and compliance with regulations.
9:25 - 9:40	3.4 Publish in the CBD	
9:40 - 10:00	B R E A K	
10:00 - 11:15	Exercise 3.4	
11:15 - 11:25	3.5 Receive and Process Responses	
11:25 - 12:00	3.6 Explain Evaluation Board Procedures	<ul style="list-style-type: none"> • Establishing evaluation boards • Explaining ranking procedures
12:00 - 1:00	L U N C H	
1:00 - 1:10	3.7 Selection Authority Makes Final Decision	
1:10 - 1:20	3.8 Short Selection Procedures	
1:20 - 3:40	Exercise 3.8 and Break	
3:40 - 4:30	Questions & Reading	

LESSON PLAN
SELECTION PROCESS

CLASSROOM EXERCISE CE-3.4

"DRAFTING A COMMERCE BUSINESS DAILY SYNOPSIS"

- Method:** Group Exercise - PART I
- Time:** 15 minutes for group work.
10 minutes for presentations
- Purpose:** The purpose of this exercise is to reinforce learning of the elements of a good A-E synopsis, concentrating on the information that is essential.
- Instruction:** Locate the example of the synopsis which follows. You are to
1. read the synopsis,
 2. identify any deficiencies, and
 3. be prepared to discuss whether, in your opinion, it is a good example or not.

CLASSROOM EXERCISE CE-3.4

PART I

EXAMPLE: CBD ANNOUNCEMENT

1. **R (Sources Sought)**
2. **Date (MMDD)**
3. **Yr.**
4. **FIPS number (Fed. Information Processing Standard)**
5. **Zip Code of Contracting Office**
6. **C (Classification Code)**
7. **Contracting Office Address.**
8. **C-Indefinite Quantity Contract for Civil Design and Engineering Services for projects in the state of Florida. (Type of Contract)**
9. **Proposed contract number.**
10. **Opening/Response Date** N/A.
11. **Contact Point/Contracting Officer, Including name and Phone No.**
12. **Contract Award Number** N/A
13. **Award Dollar Amount.** N/A
14. **Contract Line Item Number.** N/A
15. **Contract Award Date.** N/A
16. **Contractor's Name.** N/A
17. **DESCRIPTION. (Enter a clear and concise description of the action. The description may not exceed 12,000 textual characters (Approximately 3 1/2 single spaced pages).**

CLEAR, CONCISE DESCRIPTION OF SERVICES

Architect-Engineer or Engineering Services are required for preparation of plans, specifications, cost estimates, related studies, and all associated engineering services for several projects under an indefinite quantity contract. There is likely to be a wide variation in the complexity and size of the civil design projects issued under this contract as delivery orders. However, no single delivery order will exceed \$300,000 in total fees. The duration of the contract will be for one (1) year from the date of an initial contract award. The proposed contract includes a Government option for the same terms and conditions of the original contract for a period of an additional one (1) year. A maximum of \$500,000 in delivery order fees are possible during each 12 month period of the contract not to exceed \$1,000,000 for the entire contract. Design services will include:

- (A) Replace/Upgrade deteriorated sanitary lines, potable water lines and storm water drainage systems;
- (B) Security fencing;
- (C) Installation and/or repair of shoreline erosion control measures;
- (D) Roads and parking lots, new and resurfacing;
- (E) Perform property and topographic surveys;
- (F) Evaluation and definition of asbestos materials and toxic waste disposition may be required. Subsequent preparation of plans and specifications may require definition of the removal and/or disposal process. Firms responding to this announcement must be prepared to accept the aforementioned as part of their contract responsibility;
- (G) Government will reserve an option to negotiate construction inspection services and the preparation of Operating and Maintenance Support Information;
- (H) Landscaping renovation.

CLASSROOM EXERCISE CE-3.4

EVALUATION FACTORS

A-E firms responding to this announcement will be evaluated on the above requirements based on the following criteria in relative order of importance:

- (1) Professional qualifications necessary for satisfactory performance of required services;
- (2) Specialized experience and technical competence in the type of work required of the proposed engineering/technical staff who will perform the work;
- (3) Capacity to accomplish the work in the required time frame;
- (4) Past performance on contracts with Government agencies and private industry in terms of cost control, quality of work and compliance with performance schedules;
- (5) Location of the firm in the general geographic area of the contract provided that application of this criterion leaves an appropriate number of qualified firms, given the nature and size of the contract;
- (6) Use of recovered materials and achieving waste reduction and energy efficiency;
- (7) Aggressive internal quality control program with demonstrated results of reducing design errors and/or omissions;
- (8) Volume of work awarded during the last 12 month period.

GENERAL INFORMATION, INCLUDING SUBMISSION OF FORMS

The initial order for work will include cutting, patching paved areas and restoration of landscaping. No other general notification to firms for other similar projects performed under this contract will be made.

Type of contract: Firm Fixed Price. Estimated start date is _____. Those firms which meet the requirements described in this announcement and wish to be considered must submit a SF 255. One copy of the SF 255 is to be received in this office no later than the 30th calendar day after the date of appearance of this announcement in the CBD. Should the due date fall on a weekend or holiday, the SF 255 will be due the first workday thereafter. If a current SF 254 is not already on file with this office, it must be submitted with the SF 255. The SF 255 must clearly indicate the office location where the work will be performed and the qualification of the individuals and subcontractors proposed to work on the contract and their geographical location.

CLASSROOM EXERCISE CE-3.4

Method: Group Exercise - PART II

Time: 35 minutes for group work.
15 minutes for presentations

Instruction: You are to read the following:

- “Things to remember” list
- NASA project request memo
- Purchase Request
- Response memo

and then prepare Item 17 for a CBD Synopsis using the outline provided.

Each group will make a presentation on one of the four parts of the outline.

CLASSROOM EXERCISE CE-3.4

THINGS TO REMEMBER IN COMPLETING THE EXERCISE

- The purpose of the synopsis is to alert A-E firms of the Government's requirements. The description of the project should give prospective firms enough information to decide if they are interested or capable of doing the work.
- The trick is to give enough information, but without TOO much detail. It is a synopsis, not a detailed scope of work.
- The exercise does not involve Items 1 through 16 in the synopsis format. Those items are coded information items which are explained in FAR 5.207. We are concerned with the information that goes into Item 17 of the synopsis only.
- Exactly what are we requiring? Plans and specifications. Post Construction Award Services, As-builts, Studies, etc.?
- In describing the project, give the type of building you want, i.e., commissary, cafeteria, etc., give the approximate square footage. What are the design parameters? Describe the type of construction material. What about fire protection, etc.?
- We do not provide the estimated cost of construction in the synopsis. Give a cost range such as provided for in FAR 36.204. Those ranges are:
 - a) Less than \$25,000.
 - b) Between \$25,000 and \$100,000.
 - c) Between \$100,000 and \$250,000.
 - d) Between \$250,000 and \$500,000.
 - e) Between \$500,000 and \$1,000,000.
 - f) Between \$1,000,000 and \$5,000,000.
 - g) Between \$5,000,000 and \$10,000,000.
 - h) More than \$10,000,000.
- Type of Contract contemplated: A-E contracts for design project are normally Firm-fixed-price. However, remember that type of contract is negotiable.
- Give the starting and completion dates.
- All significant evaluation factors must be set forth, including their relative importance to one another. This is usually accomplished by stating "All firms responding to this announcement will be evaluated on the following factors, which are shown in descending order of importance." Sometimes two factors may be equally important. If that is the case, you must give that information to the firms. (See Exhibit 3-6 in the text/reference.) However, you may add to those factors any specific criteria your project requires and you may rearrange those factors to place them in the order of importance for your project.
- For ease of presentation, create your synopsis in bullet format rather than narrative (as it must appear in the CBD).

CLASSROOM EXERCISE CE-3.4

**NASA
Resale and Services Support Office
Pasadena, CA 91109**

From: Director, Resale and Services Support Office
NASA Residence Office, Pasadena, CA 91109

To: Director of Engineering
Kennedy Space Center, FL

Subj: CAFETERIA SERVICE TEST PROGRAM

1. The cafeteria project has been chosen as a test case by the Cafeteria Test Program. In the past the design and construction of cafeterias has been somewhat uniform. The main reason for this appears to be the tendency to select and contract with A-E firms who have experience in the design of cafeteria type eating facilities. The GAO has recently questioned this practice due to the comparatively high cost of cafeterias compared to several large fast food businesses surveyed. There has also been wide spread dissatisfaction voiced through the Resale System Feedback Program, concerning aesthetic qualities, flow patterns, convenience and comfort. Subsequently we have started this test program to evaluate new systems which enhance customer satisfaction and answer GAO concerns.
2. For the above stated reasons, it is requested that you ensure A-E services for the Space Center cafeteria are procured from a firm which has commercial food service/fast food design experience.
3. Your assistance in this matter is greatly appreciated. If there is any further information required please do not hesitate to contact my office.

Sincerely,

CLASSROOM EXERCISE CE-3.4

1. COMPONENT	FY19XX CONSTRUCTION PROJECT DATA		2. DATE FY 1993	
3. INSTALLATION AND LOCATION NASA		4. PROJECT TITLE Kennedy Space Center Cafeteria		
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
Cafeteria	SF	19,500	77.00	1502
Supporting Facilities				379
Electrical Utilities	LS			(65)
Mechanical Utilities	LS			(39)
Parking	SY	5,000	23.00	(115)
Site Improvements	LS			(90)
Demolition	LS			(70)
Subtotal (ECC)				1881
Contingency (5%)				94
Total Contract Cost				1975
Administrative (6%)				119
Total Request				\$2094
10. DESCRIPTION OF PROPOSED CONSTRUCTION				
<p>Steel frame, concrete masonry building with brick faced interior walls. Interior will include vinyl tile floor and carpet as appropriate, gypsum board walls and acoustical ceiling. The structure will be air conditioned, include cold storage area, truck loading bay and protected by fire and security alarms as well as a sprinkler system. Parking capacity for 150 cars. Vacant building on proposed site to be demolished under this project; asbestos removal may be required.</p>				
11. REQUIREMENTS:				
<p>The existing cafeteria building was constructed in 1943 under war time conditions and with war time materials. Heavy continuous use over the last 50 years, and the inefficient interior configuration makes it impractical to continue maintenance and support of the existing building. A new facility, located contiguous to the NASA office buildings, would be more convenient for workers and will increase the sales volume.</p>				

CLASSROOM EXERCISE CE-3.4

**NASA
Public Works Center**

From: Engineering Director

To: Design Division Director, Kennedy Space Center, FL

Subj: **DEMOLITION REQUIREMENT
DESIGN CONSIDERATIONS FOR THE CAFETERIA, KENNEDY SPACE
CENTER, PROJECT P-XXX**

1. The existing cafeteria to be demolished is 18,210 square feet. It consists of slab on grade, Quonset hut type construction. The interior is wood frame construction, acoustical ceiling, central air-conditioning and sprayed insulation/fire proofing. From records and visual inspection it could not be determined if asbestos is present in the insulation. The insulation was apparently added in the late 1960's, according to a longtime cafeteria employee. The freezer display cases are old and are estimated to have little or no salvage value. The butcher shop equipment was installed new in January, 1987, and is in good shape. This equipment could possibly be used in the new cafeteria or salvaged for a high value.
2. All utilities are presently on site, however, the exact location and depth of all underground lines is not known. The 4160 kVA feeder runs through the project site but does not appear to be a problem.
3. Again I am taking this opportunity to remind you of the requirement to protect the three large pine trees on the project site. The Environmental Director is adamant that the trees remain undisturbed and undamaged. This concern has been consistently addressed and is plainly identified on the Space Center Architectural Plan.
4. This should provide you enough information. However, if there is any other information you require, it will be provided as soon as possible.

Sincerely,

CLASSROOM EXERCISE CE-3.4

CBD SYNOPSIS

ITEM 17 DESCRIPTION:

1. Scope of A-E Services

-
-
-
-
-

2. Location, Cost, and General Information

-
-
-
-

3. Special Terms

-
-
-
-

4. Evaluation Criteria

-
-
-
-

CLASSROOM EXERCISE CE-3.8

"SLATE AND SELECT"

Time: 2 hours 20 minutes for group work
1 hour for presentation

Method: Group

Instructions:

Students will break into groups and proceed with the evaluation process, as follows:

1. As a time saving device, the facilitator selected for this exercise may delegate various individuals to evaluate a specific A-E using the criteria provided in the synopsis which the group developed in Classroom Exercise CE-3.4 entitled "Drafting a Commerce Business Daily Synopsis."
2. Identify and remove the applicable SF 254's and 255s from the Appendix distributing them among the group for evaluation. Use the "Slate and Selection Evaluation Notes" form provided to record evaluation data.
3. After the individuals complete their assigned evaluations, the group will meet as a whole to discuss their findings and come to an agreement on the ranking of each one.
4. Each group spokesperson must prepare a briefing as to the ranking agreed upon, explaining rationale. Use your flip chart to visually demonstrate findings to the class.
5. Following the briefing, the spokesperson will answer any questions from the class concerning the ranking and rationale.

SLATE AND SELECTION EVALUATION NOTES - FIRM A

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

Small Business SEB SDB 8(a) Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM A
EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM B

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

Small Business SEB SDB 8(a) Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM B

EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM C

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

Small Business SEB SDB 8(a) Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM C

EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods using during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM D

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

Small Business SEB SDB 8(a) Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM D
EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods using during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM E

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

Small Business SEB SDB 8(a) Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM E
EVALUATION OF RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods using during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM F

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

Small Business SEB SDB 8(a) Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM F
EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

MATRIX TO BE USED IN EVALUATIONS

RANKING

	GROUPS					
	1	2	3	4	5	
CHUBBY, INC.						
RICHARD COLLINS						
HELLMAN/PAULSON						
GARRIS AND SLICK						
LUCKY HIGHTOWER						
KINDIGH ROMERO STEIN						

CHAPTER 3 VIEWGRAPHS

FIVE ELEMENTS IN THE SCOPE OF A-E SERVICES

- 1. Intent of Contract**
- 2. Project Description**
- 3. Estimated Cost of Construction**
- 4. Schedule of Submittals**
- 5. Special Considerations**

VG 3-1

A-E QUALIFICATIONS DATA FILE

FAR 36.603

"Agencies shall maintain offices or permanent evaluation boards, or arrange to use the offices or boards of other agencies, to receive and maintain data on firms wishing to be considered for Government contracts. . . . [and] shall maintain an A-E qualifications data file."

VG 3-2

A-E QUALIFICATIONS DATA FILE CONTENTS

Firm's Name, Address, and Phone #

- **Geographic Area of Consideration**
- **Specialized Experience**
- **Professional Capabilities**
- **Capacity, with respect to SOW that can be Undertaken & Experience in CADD**
- **Small Business Size Status**
 - SDB - 8(a) - Emerging Small Business
- **Awards (Contract #, Date, Title, Amount)**
-

VG 3-3

PRESELECTION (or Slate) & EVALUATION (or Select) BOARDS

- 1. Three or more Members.**
- 2. Appointment by Letter.**
- 3. Experience in Construction, A-E, or Acquisition.**
- 4. Can't Serve on both Boards.**

VG 3-4

PRESELECTION (SLATE) BOARD FUNCTIONS

1. *Review* all qualified firms based on:
 - 254s/255s
 - CBD criteria
 - Performance evaluations
 - Spreading the work
 - Quality control plans
 - Small Business classification
2. *List* but not rank at least 3 firms.
3. *Prepare* preselection report.

VG 3-5

EVALUATION (SELECT) BOARD FUNCTIONS

FAR 36.602-3

1. *Review* current data files on firms listed in preselection report.
2. *Evaluate* and *rank* in accordance with CBD criteria.
3. *Hold discussions* with 3 top firms.
4. *Prepare* selection report.

VG 3-6

RULES FOR INTERVIEWS

- **Follow Agency policy to decide need.**
- **Give advance notice to all firms.**
- **Provide instructions to Board members.**
- **Interview all firms.**
- **Ensure that all Board members participate.**
- **Do not discuss price.**
- **Face to face preferred but can use telephone.**

VG 3-7

STRATEGY FOR INTERVIEWS

Develop Questions:

- **What is Design Team Composition?**
- **Nature of Quality Assurance?**
- **Any Time or Labor Saving Innovations?**
- **How much Work to be Subcontracted?**

VG 3-8

SHORT SELECTION PROCESS

FAR 36.602-5

1. **Contract under \$25,000**
2. **Selection by the Board**
 - **Selection report serves as final ranking.**
3. **Selection by the Chairperson**
 - **Chairperson performs Board functions.**

VG 3-9

CLASSROOM EXERCISE CE-3.4

Method: Group Exercise - PART II

Time: 35 minutes for group work.
15 minutes for presentations

Instruction: You are to read the following:

- “Things to remember” list
- NASA project request memo
- Purchase Request
- Response memo

and then prepare Item 17 for a CBD Synopsis using the outline provided.

Each group will make a presentation on one of the four parts of the outline.

CLASSROOM EXERCISE CE-3.4

THINGS TO REMEMBER IN COMPLETING THE EXERCISE

- The purpose of the synopsis is to alert A-E firms of the Government's requirements. The description of the project should give prospective firms enough information to decide if they are interested or capable of doing the work.
- The trick is to give enough information, but without TOO much detail. It is a synopsis, not a detailed scope of work.
- The exercise does not involve Items 1 through 16 in the synopsis format. Those items are coded information items which are explained in FAR 5.207. We are concerned with the information that goes into Item 17 of the synopsis only.
- Exactly what are we requiring? Plans and specifications. Post Construction Award Services, As-builts, Studies, etc.?
- In describing the project, give the type of building you want, i.e., commissary, cafeteria, etc., give the approximate square footage. What are the design parameters? Describe the type of construction material. What about fire protection, etc.?
- We do not provide the estimated cost of construction in the synopsis. Give a cost range such as provided for in FAR 36.204. Those ranges are:
 - a) Less than \$25,000.
 - b) Between \$25,000 and \$100,000.
 - c) Between \$100,000 and \$250,000.
 - d) Between \$250,000 and \$500,000.
 - e) Between \$500,000 and \$1,000,000.
 - f) Between \$1,000,000 and \$5,000,000.
 - g) Between \$5,000,000 and \$10,000,000.
 - h) More than \$10,000,000.
- Type of Contract contemplated: A-E contracts for design project are normally Firm-fixed-price. However, remember that type of contract is negotiable.
- Give the starting and completion dates.
- All significant evaluation factors must be set forth, including their relative importance to one another. This is usually accomplished by stating "All firms responding to this announcement will be evaluated on the following factors, which are shown in descending order of importance." Sometimes two factors may be equally important. If that is the case, you must give that information to the firms. (See Exhibit 3-6 in the text/reference.) However, you may add to those factors any specific criteria your project requires and you may rearrange those factors to place them in the order of importance for your project.
- For ease of presentation, create your synopsis in bullet format rather than narrative (as it must appear in the CBD).

CLASSROOM EXERCISE CE-3.4

**NASA
Resale and Services Support Office
Pasadena, CA 91109**

From: Director, Resale and Services Support Office
NASA Residence Office, Pasadena, CA 91109

To: Director of Engineering
Kennedy Space Center, FL

Subj: CAFETERIA SERVICE TEST PROGRAM

1. The cafeteria project has been chosen as a test case by the Cafeteria Test Program. In the past the design and construction of cafeterias has been somewhat uniform. The main reason for this appears to be the tendency to select and contract with A-E firms who have experience in the design of cafeteria type eating facilities. The GAO has recently questioned this practice due to the comparatively high cost of cafeterias compared to several large fast food businesses surveyed. There has also been wide spread dissatisfaction voiced through the Resale System Feedback Program, concerning aesthetic qualities, flow patterns, convenience and comfort. Subsequently we have started this test program to evaluate new systems which enhance customer satisfaction and answer GAO concerns.
2. For the above stated reasons, it is requested that you ensure A-E services for the Space Center cafeteria are procured from a firm which has commercial food service/fast food design experience.
3. Your assistance in this matter is greatly appreciated. If there is any further information required please do not hesitate to contact my office.

Sincerely,

CLASSROOM EXERCISE CE-3.4

1. COMPONENT	FY19XX CONSTRUCTION PROJECT DATA		2. DATE FY 1993	
3. INSTALLATION AND LOCATION NASA		4. PROJECT TITLE Kennedy Space Center Cafeteria		
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
Cafeteria	SF	19,500	77.00	1502
Supporting Facilities				379
Electrical Utilities	LS			(65)
Mechanical Utilities	LS			(39)
Parking	SY	5,000	23.00	(115)
Site Improvements	LS			(90)
Demolition	LS			(70)
Subtotal (ECC)				1881
Contingency (5%)				94
Total Contract Cost				1975
Administrative (6%)				119
Total Request				\$2094
10. DESCRIPTION OF PROPOSED CONSTRUCTION				
<p>Steel frame, concrete masonry building with brick faced interior walls. Interior will include vinyl tile floor and carpet as appropriate, gypsum board walls and acoustical ceiling. The structure will be air conditioned, include cold storage area, truck loading bay and protected by fire and security alarms as well as a sprinkler system. Parking capacity for 150 cars. Vacant building on proposed site to be demolished under this project; asbestos removal may be required.</p>				
11. REQUIREMENTS:				
<p>The existing cafeteria building was constructed in 1943 under war time conditions and with war time materials. Heavy continuous use over the last 50 years, and the inefficient interior configuration makes it impractical to continue maintenance and support of the existing building. A new facility, located contiguous to the NASA office buildings, would be more convenient for workers and will increase the sales volume.</p>				

CLASSROOM EXERCISE CE-3.4

**NASA
Public Works Center**

From: Engineering Director

To: Design Division Director, Kennedy Space Center, FL

Subj: DEMOLITION REQUIREMENT
DESIGN CONSIDERATIONS FOR THE CAFETERIA, KENNEDY SPACE
CENTER, PROJECT P-XXX

1. The existing cafeteria to be demolished is 18,210 square feet. It consists of slab on grade, Quonset hut type construction. The interior is wood frame construction, acoustical ceiling, central air-conditioning and sprayed insulation/fire proofing. From records and visual inspection it could not be determined if asbestos is present in the insulation. The insulation was apparently added in the late 1960's, according to a longtime cafeteria employee. The freezer display cases are old and are estimated to have little or no salvage value. The butcher shop equipment was installed new in January, 1987, and is in good shape. This equipment could possibly be used in the new cafeteria or salvaged for a high value.
2. All utilities are presently on site, however, the exact location and depth of all underground lines is not known. The 4160 kVA feeder runs through the project site but does not appear to be a problem.
3. Again I am taking this opportunity to remind you of the requirement to protect the three large pine trees on the project site. The Environmental Director is adamant that the trees remain undisturbed and undamaged. This concern has been consistently addressed and is plainly identified on the Space Center Architectural Plan.
4. This should provide you enough information. However, if there is any other information you require, it will be provided as soon as possible.

Sincerely,

CLASSROOM EXERCISE CE-3.4

CBD SYNOPSIS

ITEM 17 DESCRIPTION:

1. Scope of A-E Services

-
-
-
-
-

2. Location, Cost, and General Information

-
-
-
-

3. Special Terms

-
-
-
-

4. Evaluation Criteria

-
-
-
-

CLASSROOM EXERCISE CE-3.8

"SLATE AND SELECT"

Time: 2 hours 20 minutes for group work
1 hour for presentation

Method: Group

Instructions:

Students will break into groups and proceed with the evaluation process, as follows:

1. As a time saving device, the facilitator selected for this exercise may delegate various individuals to evaluate a specific A-E using the criteria provided in the synopsis which the group developed in Classroom Exercise CE-3.4 entitled "Drafting a Commerce Business Daily Synopsis."
2. Identify and remove the applicable SF 254's and 255s from the Appendix distributing them among the group for evaluation. Use the "Slate and Selection Evaluation Notes" form provided to record evaluation data.
3. After the individuals complete their assigned evaluations, the group will meet as a whole to discuss their findings and come to an agreement on the ranking of each one.
4. Each group spokesperson must prepare a briefing as to the ranking agreed upon, explaining rationale. Use your flip chart to visually demonstrate findings to the class.
5. Following the briefing, the spokesperson will answer any questions from the class concerning the ranking and rationale.

SLATE AND SELECTION EVALUATION NOTES - FIRM A

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

☐ Small Business ☐ SEB ☐ SDB ☐ 8(a) ☐ Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
		Type	Year	Type	State	Curr	Prev	
	Key Individuals - Block 7							

General Notes Concerning Evaluation: _____

FIRM A
EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM B

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

☐ Small Business ☐ SEB ☐ SDB ☐ 8(a) ☐ Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
		Type	Year	Type	State	Curr	Prev	
	Key Individuals - Block 7							

General Notes Concerning Evaluation: _____

FIRM B

EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM C

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

☐ Small Business ☐ SEB ☐ SDB ☐ 8(a) ☐ Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
		Type	Year	Type	State	Curr	Prev	
	Key Individuals - Block 7							

General Notes Concerning Evaluation: _____

FIRM C

EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM D

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

☐ Small Business ☐ SEB ☐ SDB ☐ 8(a) ☐ Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM D
EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM E

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

☐ Small Business ☐ SEB ☐ SDB ☐ 8(a) ☐ Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	

General Notes Concerning Evaluation: _____

FIRM E
EVALUATION OF RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods using during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

SLATE AND SELECTION EVALUATION NOTES - FIRM F

PRIME: _____ **LOCATION** _____

Capabilities _____ **Number Employed** _____

☐ Small Business ☐ SEB ☐ SDB ☐ 8(a) ☐ Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments

from SF 255 ➔ **7(b)** **7(e)** **7(f)** **7(d)** **7(g)**

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
		Type	Year	Type	State	Curr	Prev	
	Key Individuals - Block 7							

General Notes Concerning Evaluation: _____

FIRM F
EVALUATION RELATING TO CBD SELECTION CRITERIA

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

7. Cost control methods used during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

8. Geographic location of the firm with respect to the project.

MATRIX TO BE USED IN EVALUATIONS

RANKING

	GROUPS					
	1	2	3	4	5	
CHUBBY, INC.						
RICHARD COLLINS						
HELLMAN/PAULSON						
GARRIS AND SLICK						
LUCKY HIGHTOWER						
KINDIGH ROMERO STEIN						

CHAPTER 3 VIEWGRAPHS

FIVE ELEMENTS IN THE SCOPE OF A-E SERVICES

- 1. Intent of Contract**
- 2. Project Description**
- 3. Estimated Cost of Construction**
- 4. Schedule of Submittals**
- 5. Special Considerations**

VG 3-1

A-E QUALIFICATIONS DATA FILE

FAR 36.603

"Agencies shall maintain offices or permanent evaluation boards, or arrange to use the offices or boards of other agencies, to receive and maintain data on firms wishing to be considered for Government contracts. . . . [and] shall maintain an A-E qualifications data file."

VG 3-2

A-E QUALIFICATIONS DATA FILE CONTENTS

Firm's Name, Address, and Phone #

- **Geographic Area of Consideration**
- **Specialized Experience**
- **Professional Capabilities**
- **Capacity, with respect to SOW that can be Undertaken & Experience in CADD**
- **Small Business Size Status**
 - SDB - 8(a) - Emerging Small Business
- **Awards (Contract #, Date, Title, Amount)**
-

VG 3-3

PRESELECTION (or Slate) & EVALUATION (or Select) BOARDS

- 1. Three or more Members.**
- 2. Appointment by Letter.**
- 3. Experience in Construction, A-E, or Acquisition.**
- 4. Can't Serve on both Boards.**

VG 3-4

PRESELECTION (SLATE) BOARD FUNCTIONS

1. *Review* all qualified firms based on:
 - 254s/255s
 - CBD criteria
 - Performance evaluations
 - Spreading the work
 - Quality control plans
 - Small Business classification
2. *List* but not rank at least 3 firms.
3. *Prepare* preselection report.

VG 3-5

EVALUATION (SELECT) BOARD FUNCTIONS

FAR 36.602-3

1. *Review* current data files on firms listed in preselection report.
2. *Evaluate* and *rank* in accordance with CBD criteria.
3. *Hold discussions* with 3 top firms.
4. *Prepare* selection report.

VG 3-6

RULES FOR INTERVIEWS

- **Follow Agency policy to decide need.**
- **Give advance notice to all firms.**
- **Provide instructions to Board members.**
- **Interview all firms.**
- **Ensure that all Board members participate.**
- **Do not discuss price.**
- **Face to face preferred but can use telephone.**

VG 3-7

STRATEGY FOR INTERVIEWS

Develop Questions:

- **What is Design Team Composition?**
- **Nature of Quality Assurance?**
- **Any Time or Labor Saving Innovations?**
- **How much Work to be Subcontracted?**

VG 3-8

SHORT SELECTION PROCESS

FAR 36.602-5

1. **Contract under \$25,000**
2. **Selection by the Board**
 - **Selection report serves as final ranking.**
3. **Selection by the Chairperson**
 - **Chairperson performs Board functions.**

VG 3-9

LESSON PLAN

NEGOTIATION AND AWARD

CHAPTER 4

TIME	LESSON	OBJECTIVES
8:00 - 9:00	Exercise 3.8 Presentation	
9:00 - 9:10	4.0 Introduction	
9:10 - 10:00	4.1 Issue a Request for Proposals	
10:00 - 10:20	B R E A K	
10:20 - 11:00	4.2 Evaluate Govern-ment Estimate	
11:00 - 11:30	4.3 Evaluate A-E's Proposal	Obtain cost & pricing data (if necessary).
11:30 - 12:30	L U N C H	
12:30 - 1:00	4.3 (cont. Profit vs. 6% Fee)	
1:00 - 3:00	Exercise 4.3	
3:00 - 3:10	4.4 Prepare for Negotiations	<ul style="list-style-type: none"> • Establish objectives • Set date and notify participants
3:10 - 3:25	4.5 Negotiate	<ul style="list-style-type: none"> • Evaluate for fair and reasonable price • Go to next firm on list if not fair & reas.
3:25 - 3:30	4.6 Obtain Approvals & Issue Contract	
3:30 - 4:30	Questions & Reading	

LESSON PLAN
NEGOTIATION AND AWARD

CLASSROOM EXERCISE CE-4.3

Social Security Administration

Building Project

INSTRUCTION

Contents for the exercise are found in the order listed below:

- **Instructions**
- **Scope of Work**
- **A-E Fee Proposal, including Estimate of Required Drafting and Engineering Effort**
- **Overhead Analysis Form**
- **General Wage Rates**
- **Questionnaire**

Purpose of the Exercise: Reinforcement of instruction regarding the tasks that are considered when determining the amount of profit based on risk.

- * Identifying unallowable costs.
- * Determine the accuracy and completeness of the A-E's proposal by performing a general review.
- * Calculate design services percentage.

Method: Interactive Group Participation

Time: 1 hour 20 minutes for Preparation
40 minutes for Presentation

Instructions: Students are to review the proposal submitted by the contractor and complete the questionnaire following the exercise using the Text/Reference or student lecture notes and the information provided.

The spokesperson will reveal the group's findings during the discussion period following the exercise.

CLASSROOM EXERCISE CE-4.3

Instructions

SOCIAL SECURITY ADMINISTRATION BUILDING REVIEWING THE A-E'S PROPOSAL

I. FACTS AND CIRCUMSTANCES

- A. The data furnished in this exercise include the basic design criteria.
- B. Submittals to be made by the A-E:
 - 1. Early Preliminaries (35% complete) (NTP + 6 weeks)
 - a. 30 copies of the Project Engineering Documentation for the prospectus project.
 - b. 2 copies of the preliminary cost estimate.
 - c. 5 copies of specifications.
 - d. 5 sets of drawings.
 - 2. Pre-Final Design (100% complete) (NTP + 18 wks)
 - a. 6 sets of working drawings.
 - b. 6 copies of project manual with bid schedule.
 - c. 2 copies of construction cost estimate.
 - d. Marked 35% submittal.
 - 3. Corrected Final Design (100% complete) (NTP + 24 wks)
 - a. Original tracings plus 1 set of prints and construction bid drawings.
 - b. Original plus 1 set of prints of construction bid drawings.
 - c. Original of Final Design Analysis.
 - d. 2 copies of construction cost estimate.
 - e. Marked Pre-Final submittal.
 - 4. Designer to client presentation.
- C. The A-E is located within 20 miles of the site.

II. THE GOVERNMENT WILL FURNISH THE A-E WITH:

- A. Standard details and symbols to be used.
- B. Guide specifications.
- C. Technical manuals.
- D. Architectural-Engineering instruction manuals.
- E. Site Plan (attached) which was developed in-house two years prior.
- F. First and Second floor plans (attached) from a similar facility design.

CLASSROOM EXERCISE CE-4.3

SCOPE OF WORK

I. INTRODUCTION.

A. Project description

This two story Administration Building will contain 25,000 square feet and has a programmed dollar amount of \$2,500,000 of which there is a construction cost limitation (ECC) of \$2,350,000.

The project is one of several similar projects to be built for Social Security across the country. The lead time for the A-E to submit 35% design is considered tight, as is the rest of the submittals. The contract calls for a constructability review by an independent subcontractor prior to submission of the final design submittals.

The contract type vehicle to be used is a firm fixed price.

II. STRUCTURE.

A. Complete Description of Facility Function. This building will serve as the Administration Building for the Social Security Office. Located within this building are Social Security Staff, Public Works Department, Telephone Switchboard Operations including the Telephone Central Office switching equipment, Conference rooms and a Cafeteria (lunchroom).

B. Materials. Reinforced concrete.

C. Security Requirements. Routine.

D. Paper Pulper. Design for a small paper pulper: capacity 25 pounds of waste paper per day. Paper pulper will be Government furnished and installed by construction contractor.

III. GAS DISTRIBUTION.

A. Areas and Loads. See site plan for the areas to be served. The primary load will be a gas-fired plant.

B. Light, Ordinary, or Hazardous Occupancy: Design will be based on ordinary occupancy, 24 hours per day.

C. Capacity of the Existing Water Supply. The existing water supply is adequate for normal use including the proposed new sprinkler system.

D. Water Flow Alarm System. Activation of the automatic sprinkler system will generate an alarm signal to the fire station.

E. Fire Alarm. Design the fire alarm system in accordance with local fire codes.

CLASSROOM EXERCISE CE-4.3

IV. PAVING

- A. Parking Lot Capacity. Design parking spaces for 113 vehicles including parking for building personnel, 8 Government vehicles, and for 2 visitors (message pickups). See sit plan.
- B. Design Loading - Medium. Medium duty bituminous pavement.
- C. Striping and Signs. Design in accordance with regional highway authority conventions/direction.
- D. Lighting. Design mercury vapor lights, controlled by a photo-electric cell, installed on the building exterior illuminating the sidewalks and parking areas. Design lighting intensity to accommodate the 24-hour operation considering shift change during the hours of darkness.

V. ELECTRICAL DISTRIBUTION

- A. Government-Owned Distribution Feeders. Design three phase, 4-wire 7960/13800 Volt grounded wye, 60 Hz primary power is available 115 ft south of the new building location. At this point a new pole with three transformers shall be set to deliver 120/208 Volt, 3 phase, wye current. Design service to the building underground to the new mechanical room.

VI. SITE DESCRIPTION

- A. Available Fill. Fill material is not available on the site and will be procured from off-site sources.
- B. Landscaping. Fine grading, restoration of grass, and landscaping of the entire area of construction work is required. A sprinkler system is required due to the climatic conditions of the area.
- C. Disposal Areas. Only soil and natural rock may be disposed of at the city disposal area. Organic materials and construction materials will be disposed off off-site.
- D. Heating Value and Type Gas. Design for natural gas (heating value of 1000 BTU/CF). Pressure is regulated outside of the facility and adjacent to the gas-fired equipment inside the facility.
- E. Corrosion Control. Design a cathodic protection system to protect the gas pipeline; cathodic protection system will be compatible with the existing base cathodic protection system.
- F. Soil Geological Conditions Generally Encountered Near the Site
 - 1. Subsurface Condition - General: The site is located in the Coastal Plain physiographic province. The coastal plain is a rolling prairie underlain by tertiary and Cretaceous age beds of marls, clays, and poorly consolidated sands. These beds are covered by a 5 to 25-foot thick mantle of alluvial overburden consisting of clay, silt, and sand beds underlain by gravel deposits. The gravel deposits are usually water bearing.

CLASSROOM EXERCISE CE-4.3

2. Types of Foundations Generally Used: Due to heaving, the trend is away from deep drilled piers and is toward lightweight mats and shallow spot footings. If there is no suitable shallow stratum capable of supporting the structure, and the structure requires some foundation other than the shallow mat, then drilled and under reamed cast-in-place, concrete piping should be considered by the designer.

3. In lieu of tests, use a CBR value of 4 for uncompacted subgrades.

VII. MECHANICAL CONSIDERATIONS

A. Domestic Hot Water and Drinking Fountains. Design system for domestic hot water and drinking fountains.

B. Air Conditioning Filters. Medium efficiency (50-60%) filters.

C. Special Mechanical Systems. Design for dual refrigeration chillers with air cooled condensor to allow continuation of cooling and concurrent maintenance. Use a chilled water system for versatility in use of dual systems and flexibility for future expansion. Provide one chiller with emergency power. Design to prevent overloading the emergency generator or causing excessive voltage fluctuations that will affect equipment. Provide selector switch for running either chiller independent from the other. Design for maintenance of environmental conditions in the telephone equipment rooms, when emergency power is used. The emergency generator may be located outside if sufficient space is not available in the mechanical room.

D. Energy Evaluation. Evaluation of Energy Budget against current criteria is required. Consider building orientation and solar evaluation or optimum efficiency.

IX. ELECTRICAL CONSIDERATIONS.

A. Telephone Extension Circuit. Provide an empty conduit system for telephone outlets.

B. Standby Power. An existing 100 KW standby generator will be provided as Government Furnished Equipment. Design for new appurtenances such as a transfer switch.

C. Fire Alarm System. Design automatic fire detection equipment to provide local, audible alarms and send automatic coded alarms to the central fire station. Connection from the building to the central fire station shall be by others.

D. Security Alarm System. Design a security duress and intrusion burglar alarm system.

E. Emergency Lighting. Provide automatic battery-operated emergency lighting for the entire building in accordance with NFPA Codes.

F. Lighting Levels and Illumination Required. Design lighting providing illumination levels in accordance with the Illumination Engineers' Society Handbook recommendations.

CLASSROOM EXERCISE CE-4.3

G. Receptacles for Portable Equipment. Design receptacles for portable equipment. Provide 208V 30 amp receptacle for paper pulper.

X. SPECIAL CONSIDERATIONS.

A. Equipment List. The telephone plant will consist of 2600 lines, "Stroger" switch, step-by-step system. Four positions of switchboards to support the 2600 lines. Twenty-three storage batteries with one rectifier. Two test boards and a main distribution frame (MDF) with 33 vertical of 302 pair count for each verticula. This function will operate 24 hours per day, 7 days per week. The following equipment will be in operation: one teletype printer for official Western Union Traffic; two teletype machines ASR 28; one IBM transmission control, 100 cards per minute unit.

B. Utilities Tie-In Requirements. All gas, water, electric and sewer services are available and adequate in the immediate vicinity.

C. Government-Furnished Equipment. All telephone equipment in this facility will be Government-furnished and Government-installed.

D. Master Keying Requirements. This facility has been located within the Commercial Complex on the master plan and master keying is required.

A-E FEE PROPOSAL				
PROJECT TITLE:		SOCIAL SECURITY ADMINISTRATION		
LOCATION:		ANY TOWN, USA		
NAME OF FIRM:		SMITH/SMITH & ASSOC.		
CONTRACT NUMBER:				
ESTIMATED CONSTRUCTION COST:		\$2,350,000		
SECTION A: DESIGN				
	NO. OF DRAWINGS	EST. NO OF HOURS	HOURLY RATE	TOTAL ESTIMATED COST
ITEM 1				
A. PROJECT ENGINEER		214	30.50	6527.00
B. ARCHITECT	10	248	27.05	6708.00
DRAFTSMAN		300	14.00	4200.00
C. STRUCTURAL ENGINEER	4	160	28.80	4608.00
DRAFTSMAN		106	14.00	1486.00
D. MECHANICAL ENGINEER	9	155	28.05	4348.00
DRAFTSMAN		132	14.82	1956.00
E. ELECTRICAL ENGINEER	5	165	26.95	4447.00
DRAFTSMAN		144	14.00	2016.00
F. CIVIL ENGINEER	7	168	26.05	4376.00
DRAFTSMAN		154	14.00	2156.00
G. LANDSCAPE ARCH. DRAFT.				
H. OTHER	3	16	14.00	224.00
TOTAL ITEM 1	38	16	14.00	43,052.00
ITEM 2				
A. SPEC/REPORT WRITER		170	21.00	3570.00
B. TYPIST		200	12.50	2500.00
C. OTHER		40	9.50	380.00
TOTAL ITEM 2				6450.00
ITEM 3				
A. COST EST. ENGINEER		84	23.00	1932.00
TOTAL DIRECT COST (ITEMS 1,2,3)				\$51,434.00
OVERHEAD (G&A): 153 % X \$51,434 = \$78,694.02				\$78,694.00
PROFIT: 9.8 % X (\$51,434+\$78,694) = \$12,763				\$12,763.00
TOTAL THIS SIDE NOT TO EXCEED 6% OF ESTIMATED CONSTRUCTION COST		DESIGN TOTAL (DIRECT COST + G&A + PROFIT)		\$ 132,891.00

PREPARED BY: _____

DATE: JUNE 20, 199x

A-E FEE PROPOSAL SIDE TWO

		EST NO. HOURS	HOURLY RATE	TOTAL ESTIMATED COST
SECTION B				
REVIEW CONTRACT SUBMITTALS		60 80	30.50 28.05	1830.00 2244.00
			SUB-TOTAL	4074.00
SECTION C				
RECORD DRAWING PREPARATION		80	14.00	252.00
SECTION D				
INTERIOR DESIGN		90	16.50	1485.00
SECTION E				
ENGINEERING SERVICES	1. SITE INVESTIGATIONS			
	A. SUB SOIL STUDIES			
	(1) BORINGS 20 @ 25 LG = 500 LF X 9.80 LF			4900.00
	(2) MOBILIZATION 250.00 + REPORT 400 =			650.00
	B. SURVEYS: PARTY DAYS 2 DAYS @ 750.00			1500.00
	C. FIELD			
	INVESTIGATIONS: MAN DAYS 4 DAYS @ 210.00=			840.00
	2. SERVICES-CONSULTANTS OR OTHER			
	SPECIAL COSTS			
	A. COMPUTER STUDY			
	B. ENVIRONMENTAL STUDY TYPE 2			
	C. REPRODUCTION			
	1. DRAWINGS 38 @ .27 X 40 = 410.00			
	2. SPECIFICATION COPIES 40 @ \$28.00 =			1120.00
	D. OTHER			
	SUB-TOTAL			12,220.00
SECTION F				
TRAVEL	AUTO MILES 240 @ .26 = 62.40			62.00
	AIRFARE + RENTALS =			
	PER DIEM: DAYS @ \$28 Day =			224.00
	SUB-TOTAL			286.00
NON-DESIGN TOTAL	(AMOUNT TO INCLUDE: OTHER DIRECT COSTS + G&A + PROFIT)			
	TOTAL OTHER DIRECT COSTS (SECTIONS B,C,D,E &F)			18,317.00
	OVERHEAD (G&A): 153% X 18,317 =			28,025.00
				46,342.00
	PROFIT 9.8 X 46,342.00 =			4,542.00
				50,884.00
	TOTAL FROM SECTION A			\$132,891.00
	TOTAL CONTRACT AMOUNT			\$183,775.00

ESTIMATE OF REQUIRED DRAFTING AND ENGINEERING

	NO. OF SHEETS	DRAFTING TIME	ENGINEERING TIME
<u>MISCELLANEOUS</u>			
COVER	1	4	-
INDEX	1/2	2	-
BORINGS LOG	1	8	-
LOCATION MAP	1/2	2	-
SUBTOTAL	3	16	0

<u>CIVIL</u>			
ABBREVIATIONS AND SYMBOLS	1	16	12
SITE DEMOLITION PLAN	1	36	20
SITE LAYOUT PLAN	1	14	32
PAVING DETAILS	1	16	8
GRADING PLAN	1	32	48
UTILITIES PLAN	1	12	28
UTILITIES DETAILS	1	20	16
LAWN SPRINKLER SYSTEMS	1	8	4
SUBTOTAL CIVIL	7	154	168

<u>ARCHITECTURAL</u>			
FLOOR PLAN	2	40	60
INTERIOR ELEVATIONS	4	24	24
EXTERIOR ELEVATIONS	2	16	16
SECTIONS AND DETAILS	1	36	36
DOOR AND WINDOW SCHEDULES	1/2	30	12
DOOR DETAILS	1/2	8	8
WINDOW DETAILS	1/2	10	4
WALL SECTIONS	1	44	32
EQUIPMENT SCHEDULE	1/2	24	26
REFLECTED CEILING PLAN	-	-	-
MISCELLANEOUS DETAILS	-	-	-

ESTIMATE OF REQUIRED DRAFTING AND ENGINEERING
(Continued)

	NO. OF SHEETS	DRAFTING TIME	ENGINEERING TIME
<u>ARCHITECTURAL</u>			
SIGNS	1	20	10
FOOD SERVICE DETAILS	1	48	20
SUBTOTAL ARCHITECTURAL	10	300	248
<u>STRUCTURAL</u>			
FOUNDATION PLAN	1	20	32
FOUNDATION DETAILS	ON FOUNDATION PLAN	12	2
FRAMING PLAN	2	30	26
FRAMING DETAILS & SECTIONS	ON FRAMING PLAN	14	24
SUPERSTRUCTURE DETAILS	1/2	18	32
BEAM, JOIST & COLUMN			
SCHEDULE	1/2	12	26
SUBTOTAL STRUCTURAL	4	106	160
<u>MECHANICAL</u>			
PLUMBING ROOF PLAN	2	28	32
PLUMBING DETAILS	1	8	8
PLUMBING SCHEDULES	1	12	4
SPRINKLER FLOOR PLAN	1	16	12
HEATING & A/C FLOOR PLAN	1	24	31
HEATING & A/C DETAILS	1	12	8
HEATING & A/C SCHEDULES	1	8	8
AIR SYSTEM PLAN	-	-	-
HYDRAULIC SYSTEM PLAN	-	8	2-
HEATING & A/C CONTROLS	1	16	32
SUBTOTAL MECHANICAL	9	132	155

ESTIMATE OF REQUIRED DRAFTING AND ENGINEERING
(Continued)

	NO. OF SHEETS	DRAFTING TIME	ENGINEERING TIME
<u>ELECTRICAL</u>			
LIGHTING FLOOR PLAN	1	32	40
POWER FLOOR PLAN	1	34	44
ELECTRICAL DETAILS	1	24	8
ELECTRICAL SCHEDULES	1	12	8
SUBSTATION	-	10	20
COMMUNICATIONS PLAN	1	32	45
SUBTOTAL ELECTRICAL	5	144	165
TOTAL 38	852	896	

A-E FIRM _____
PROJECT _____
LOCATION _____

OVERHEAD ANALYSIS FORM

(___ MONTHS ENDING ___ FROM FINANCIAL STATEMENT)

1.	Vacation, Holiday, and Sick Leave	\$15,726
2.	Training	\$1,593
3.	Health and Insurance Program	\$2,975
4.	Payroll Taxes	\$17,734
5.	Pension, Retirement Plans	\$0
6.	Travel	\$5,618
7.	Reproduction	\$263
8.	Commissions and Bonuses	\$0
9.	Advertising for A/E Services	\$349
10.	Contributions to Historic Building Fund	\$525
11.	Dividend Payment	\$0
12.	Entertainment	\$1,045
13.	Interest on Borrowings	\$6,801
14.	Income Taxes	\$7,806
15.	Bad Debts	\$935
16.	Losses	\$0
17.	Fines and Penalties	\$482
18.	Typing, Filing	\$409
19.	Salaries of Principals	\$32,950
20.	Salaries of Technical Personnel (indirect)	\$48,153
21.	Accounting	\$3,422
22.	Dues (Licenses and dues to professional organizations)	\$3,757
23.	Office Equipment Lease	\$122
24.	Telephone and Telegraph	\$5,016
25.	Subscriptions and Periodicals	\$0
26.	Depreciation - Office Equipment	\$13,372
27.	Office Rent	\$45,207
28.	Utilities	\$4,005
29.	Maintenance and Repair	\$2,356
30.	Automobile	\$0
31.	Others (explain)	
	Postal/Deliver	\$2151
	Other Office Expenses	\$5301
	Legal Fees	\$400
	Professional liability	<u>\$32,059</u>
		<u>\$ 39,911</u>
Total Overhead		\$260,532

Direct Labor \$170,282

OVERHEAD RATE **\$260,532 / \$170,282 =** **153%**

GENERAL WAGE RATES

1. In the absence of historical wage rates or rates from other sources, the rates in this Exhibit may be used when analyzing A-E professional wage rates in a proposal. The salary structures reflect the ranges of the respective GS ratings. The suggested hourly rate is the average hourly rate to the nearest quarter dollar. Data is from the January 1988 Federal Pay Schedule.

A. PROFESSIONAL GRADE: VII EQUIVALENT: GS-15

(1) Duties and Responsibilities - Supervision and direction, with final administrative authority, a large engineering or research organization comprising major divisions; determines policies; establishes and administers procedures; final responsibility for operation of organization; etc.

(2) Typical Position Title - Chief Engineer; Director of Research; Dean of School of Engineering; etc.

(3) Salary Structures -

(a) Government equivalent	\$54,907	to	\$71,377
(b) Government hourly rates	\$26.41	to	34.33
(c) Suggested hourly rate			30.00

B. PROFESSIONAL GRADE: VII EQUIVALENT: GS-14

(1) Duties and Responsibilities - Supervise and direct, with final administrative authority, a large engineering research, or technical operation of the organization, etc.

(2) Typical Position Title - Chief or Assistant Chief Engineer; Manager of Engineering; Director of Research; Department Head in School of Engineering; etc.

(3) Salary Structures -

(a) Government equivalent	\$46,679	to	\$60,683
(b) Government hourly rates	22.45	to	29.19
(c) Suggested hourly rate			26.00

GENERAL WAGE RATES

(Continued)

C. PROFESSIONAL GRADE: VI EQUIVALENT: GS-13

(1) Duties and Responsibilities - Plan, direct, or supervise work of major engineering unit is design and research, usually in a particular branch of engineering; manages small organization, or a major design or research division in a particular engineering field; assumes professional and executive responsibility, etc.

(2) Typical Position Title - Division or District Engineer; Production Engineer; Principal Engineer; Full Professor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$39,501	to	\$51,354
(b)	Government hourly rates	19.00	to	24.70
(c)	Suggested hourly rate			22.00

D. PROFESSIONAL GRADE: V EQUIVALENT: GS-12

(1) Duties and Responsibilities - Performs important engineering requiring special qualifications with wide latitude for action and decision; plans, directs, and supervises design of major projects; supervises preparation of specifications and contracts; performs comprehensive research and testing; etc.

(2) Typical Position Title - Project or Senior Engineer; Senior Test or Process Engineer; Associate Professor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$33,218	to	\$43,181
(b)	Government hourly rates	15.98	to	20.77
(c)	Suggested hourly rate			18.00

GENERAL WAGE RATES

(Continued)

E. PROFESSIONAL GRADE: IV EQUIVALENT: GS-11

(1) Duties and Responsibilities - Engineering assignments under general direction; responsible for choice in making decisions and interpretations; design; write specifications from guides or instructions; plans tests and processes to obtain specific results; etc.

(2) Typical Position Title - Project Engineer; Design Engineer; Chief Draftsman; Research Engineer; Assistant Professor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$27,716	to	\$36,032
(b)	Government hourly rates	13.33	to	17.33
(c)	Suggested hourly rate			15.00

F. PROFESSIONAL GRADE: III EQUIVALENT: GS-09

(1) Duties and Responsibilities - Basic application of engineering fundamentals to engineering work; under direction; but not immediate supervision; limited choice of action; select and recommend procedures in design and research; writes specifications from guides; perform higher grade drafting; prepare technical reports; etc.

(2) Typical Position Title - Senior Engineering Assistant; Senior Draftsman; Design Draftsman; Senior Inspector; Instructor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$22,907	to	\$29,783
(b)	Government hourly rates	11.01	to	14.35
(c)	Suggested hourly rate			13.00

GENERAL WAGE RATES

(Continued)

G. PROFESSIONAL GRADE: II EQUIVALENT: GS-07

(1) Duties and Responsibilities - Basic working knowledge of engineering fundamentals in a particular field, under immediate supervision or direction; make and check quantity estimates; detail drawings from design by others; perform routine tests; sets up process equipment; records and compiles test data; etc.

(2) Typical Position Title - Engineering Assistant; Checker; Quantity Estimator; Engineering Draftsman; Lab Assistant; Assistant in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$18,726	to	\$24,342
(b)	Government hourly rates	9.00	to	11.70
(c)	Suggested hourly rate			10.35

H. PROFESSIONAL GRADE: I EQUIVALENT: GS-05

(1) Duties and Responsibilities - Routine tasks requiring knowledge of engineering fundamentals in a particular field; under close and immediate supervision; compiles data; computes quantities; traces; performs simple drafting; makes and records observations; etc.

(2) Typical Position Title - Draftsman; Detailer; Engineer Assistant; etc.

(3) Salary Structure -

(a)	Government equivalent	\$15,118	to	\$19,654
(b)	Government hourly rates	7.27	to	9.45
(c)	Suggested hourly rate			8.00

I. CLERICAL - TYPING POSITIONS: EQUIVALENT: GS-04

Suggested hourly rates for typists correspond to hourly rates for Government personnel at GS-04 level, which average at about \$7.50 hour. Remember that skilled word processor operators receive higher hourly rates BUT work proportionately FASTER.

QUESTIONNAIRE

After reviewing the proposal submitted by the A-E, answer the following questions:

1. After reviewing the proposal, do you believe that the A-E thoroughly understands the scope?

YES _____ NO _____

E x p l a i n : _____

2. How would you generally classify this project as to risk?

_____ Simple

_____ Difficult

_____ Routine

_____ Very complex

3. What about period of performance? Is there risk involved?

YES _____ NO _____

Explain:

4. What is the contract type? _____

5. Are there any mathematical errors?

YES _____ NO _____

6. In comparing the number of drawings and estimate of hours, do the figures match when compared with the scope?

YES _____ NO _____

QUESTIONNAIRE (Cont.)

7. Using the information provided concerning the Government General Wage Rates and comparing the figures to the A-E's proposal, do the wages under Section A. Design seem reasonable?

YES _____ NO _____

8. Review the listing on the Overhead Analysis form. Identify any unallowables or questionable items.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Does the overhead rate of 153% appear to the reasonable?

YES _____ NO _____

10. Will a cost and price certification be required at the conclusion of negotiations?

YES _____ NO _____

11. Is an audit required?

YES _____ NO _____

12. Does the A-E proposal exceed the 6% Fee limitation?

CHAPTER 4 VIEWGRAPHS

RFP IS NOT AN AWARD

Costs of Preparing a Proposal

are considered

Costs of Doing Business and

will not be

Reimbursement by the Government.

VG 4-1

ELEMENTS OF COST

- **DIRECT LABOR OR SALARY**
- **OVERHEAD ON DIRECT LABOR**
- **GENERAL AND ADMINISTRATIVE**
- **MATERIAL**
- **TRAVEL**
- **OTHER SIGNIFICANT ITEMS**
- **PROFIT**

VG 4-2

REVIEWING THE A-E PROPOSAL

You must be familiar with the Scope and be knowledgeable of:

- **Structure of the Proposal,**
- **TINA Requirements,**
- **Cost Principals, and**
- **Elements of Cost Peculiar to A-E's.**

VG 4-3

TYPICAL UNALLOWABLE COSTS

- | | |
|--|-----------------|
| • ADVERTISING
CONTINGENCIES | • |
| • BAD DEBTS
CONTRIBUTIONS | • |
| • DIVIDEND PROVISIONS
ENTERTAINMENT | • |
| • FINES, PENALTIES | • LOSSES |
| • INSURANCE FOR ERRORS OR OMISSIONS | |

VG 4-4

DIRECT COSTS

COST that can be Identified with a Particular Cost Objective:

- | | |
|-----------------------|-----------------------|
| • SALARIES | • SHIPPING |
| • TRAVEL | • REPRODUCTION |
| • SOIL BORINGS | • SURVEYING |

VG 4-5

DIRECT LABOR

RELATES TO AMOUNT OF EFFORT

HOW MANY?

- **DRAWING?**
- **HOURS OF ENGINEERING?**
- **HOURS OF DRAFTING?**
- **FIELD TRIPS?**

WHAT MAKES UP THE HOURLY RATE?

VG 4-6

DIRECT MATERIAL

EXAMPLES:

- **PAPER**
- **MODEL BUILDING MATERIALS**
- **MYLARS**
- **TESTING CONSUMABLES (CHEMICALS)**
- **PHOTOGRAPHS**

VG 4-7

TRAVEL

**MUST COMPLY WITH JOINT
TRAVEL REGULATIONS**

- **HOW MANY TRIPS?**
- **HOW MANY PEOPLE ON EACH TRIP?**
- **HOW LONG WILL EACH TRIP BE?**
- **IS THIS TRIP NECESSARY?**

VG 4-8

OTHER SIGNIFICANT COSTS

- **REPRODUCTION COSTS**
- **RENDERINGS OR MODELS**
- **SURVEYS**
- **CADD SYSTEM COSTS**
- **SOILS INVESTIGATIONS**
- **SPECIFIC CONSULTANTS**

VG 4-9

CONSULTANT/SUBCONTRACTOR

- **SURVEYING/BORINGS**
- **INTERIOR DESIGN**
- **MODEL BUILDING**
- **ACOUSTICAL**
- **SPECIAL FINISHES**
- **ELECTRICAL**
- **MECHANICAL, ETC.**

VG 4-10

INDIRECT COSTS

Those Costs that aren't considered Direct to the Project, but are Expenses the A-E incurs in doing Business and can be spread Proportionately over all of its Business.

- | | |
|-------------------------------|------------------------|
| • RENT | • HOLIDAYS |
| • PRINCIPAL'S SALARIES | • VACATION TIME |
| • SECRETARY | • ACCOUNTANT |
| • FRINGE BENEFITS | • BONUSES |
| • SOCIAL SECURITY | • UNEMPLOYMENT |
| • INSURANCE | |

VG 4-11

GENERAL & ADMINISTRATIVE

**MOST A-Es LUMP THEIR
OVERHEAD
INTO THE SAME COST POOL
AS THEIR
G&A.**

VG 4-12

CERTIFICATION OF COSTS

- 1. THRESHOLD \$500,000**
- 2. TO SUBMIT USE OF SF 1411**
- 3. CERTIFY DATA ACCURATE,
 COMPLETE,
 CURRENT**

FACTUAL COSTS VS JUDGMENTAL COSTS

VG 4-13

6 % FEE

**The 6% statutory fee limitation applies only to the
DESIGN services portion of the A-E's proposal:**

- Working Drawings**
- Specifications**
- Construction Cost Estimate**

VG 4-14

NEGOTIATION EFFECT		
<i>Approach</i>	<i>Outcome</i>	<i>Result</i>
Maximize	Win/Lose	Renegotiation
Compromise	Lose/Lose	Dissatisfaction
Integration	Win/Win	Satisfaction

VG 4-15

NEGOTIATION AGENDA
1. INTRODUCTIONS
2. DIRECT LABOR EFFORT FOR DESIGN (6%)
3. DIRECT LABOR EFFORT FOR OTHER THAN DESIGN SERVICES.
4. COST REIMBURSABLE POOLS
• TRAVEL AND PER DIEM
• SITE INVESTIGATION
5. GENERAL & ADMINISTRATIVE COSTS (G&A)
6. PROFIT

VG 4-16

LESSON PLAN

CONTRACT ADMINISTRATION

CHAPTER 5

TIME	LESSON	OBJECTIVES
8:00 - 8:05	5.0 A-E Contract Administration	
8:05 - 8:20	5.1 Develop Contract Administration Plan	Develop a complete plan which assures that an Agency will meet its goals.
8:20 - 8:30	5.2 Conduct Post Award Orientation	Cover all topics necessary for A-E to have a complete understanding of its duties.
8:30 - 9:30	5.3 Monitor, Inspect, & Accept A-E Services	<ul style="list-style-type: none">• Achieving quality• Processing progress payments
9:30 - 9:50	B R E A K	
9:50 - 10:00	5.4 Select Appropriate Remedy	<ul style="list-style-type: none">• A-E specific clauses• Terminations
10:00 - 10:30	Exercise 5.4	
10:30 - 10:35	5.5 Issue Delay or Suspension	<ul style="list-style-type: none">• Recognize how delays can occur• Avoid constructive delay situations
10:35 - 10:45	5.6 Negotiate Contract Modifications	Perform all contractual actions for the issuance of a modification.
10:45 - 11:15	Exercise 5.6	
11:15 - 11:35	5.7 Closeout Contract	Perform all actions necessary to close out an A-E file, including SF 1421.
11:35 - 12:00	Exercise 5.7	
12:00 - 1:00	L U N C H	
1:00 - 3:00	E X A M	

LESSON PLAN

CLASSROOM EXERCISE CE-5.4

"THE WAREHOUSE CAPER"

Time: 15 minutes for Preparation
15 minutes for Presentation

Method: Group Discussion

Instruction:

Students will break into their respective groups and decide who is to serve as spokesperson.

Read the scenario and using the flipchart prepare answers to the four (4) questions which follow.

The instructor will call upon the spokesperson to relay to the class the consensus of the group.

Prepare to discuss.

CLASSROOM EXERCISE CE-5.4

THE WAREHOUSE CAPER

The A-E was directed by the scope of the contract to demolish an existing warehouse and design a new warehouse on the same site. Furthermore, the A-E was directed in the scope of the contract work to make loading platforms 54 inches in height above the truck ramp.

The A-E elected to use the existing truck ramps for measurements; but in the process of designing the structure, the loading dock was only 36 inches above the height of the truck ramp, if constructed properly by the construction contractor. The dimensions on the plans were given for the height of the truck ramp and the height of the loading dock but nowhere on the plans did it show the height of the loading dock above the truck ramp.

The construction contractor completed the building. The Government inspected and accepted the work and a final release was provided by the construction contractor. The user of the warehouse installed various supply-handling equipment in the warehouse of the most modern type which took one year.

The first supplies arrived at the loading dock one year after the completion of the construction contract, and it was discovered that they could not be unloaded from the truck because of the height of the loading dock. The user of the warehouse was upset and advised the contracting officer in language that cannot be printed, that the facility was not usable as constructed.

The contracting officer investigated and found that the construction contractor constructed the warehouse precisely as set forth in the plans and specifications; however, during inspection the Government failed to notice the non conformance. He determined that the A-E failed in its responsibility to follow specific directions given by the Government to make the loading dock 54 inches above the truck ramp.

CLASSROOM EXERCISE CE-5.4

"THE WAREHOUSE CAPER"

1. Since the discovery took place one year after construction, can the Government go back on the A-E for replacement costs under the Responsibility clause?

2. Did the Government give away its rights when it inspected and accepted the facility?

3. Is the Government to blame because of poor or sloppy inspection?

4. Would the A-E's failure be considered negligent? If so, would damages be collected.

CLASSROOM EXERCISE 5.6

“THE 6% SOLUTION”

Time: 15 minutes for Preparation
15 minutes for Presentation

Method: Individual Calculations

Instruction:

Students are to

- Read the scenario below and pages 5-40 to 5-42 in the T/R,
- Do the 6% calculations individually using copy of Exhibit 5-15 provided with the exercise, and
- Determine if the 6% limitation has been exceeded.

The instructor will call upon one person from each group to respond and indicate how the design percentage was derived

6% SCENARIO

An initial contract was awarded to an A-E firm in the total amount of \$120,000, with an Estimated Cost of Construction (ECC) of a new facility @ \$1,500,000. The contract called for various engineering services in the amount of \$40,000, and a design fee of \$80,000.

The A-E had submitted, and the Government approved, the design up to 85% when the user submitted a change order request for some changes which resulted in the scrapping of \$5,000 worth of previous design work. The changes also resulted in an increase in the ECC of \$450,000, and an increase in the design fee of \$30,000.

What is the design fee calculation?

CLASSROOM EXERCISE 5.6

COMPUTATION OF DESIGN FEE PERCENTAGE

A. For initial award:

$$\text{Design \%} = \frac{\text{Design Fee}^*}{\text{Estimated Construction Cost}} \text{ times } 100$$

B. For modifications:

	<u>Estimated Construction Cost</u>	<u>Design Fee</u>	<u>Percent</u>
Basic contract plus previous changes	\$ _____ ①	\$ _____ ②	_____ ③
This change	\$ _____	\$ _____	
Subtotal	\$ _____	\$ _____	_____
Less lost design effort		\$ _____ ④	
Less breakage		\$ _____ ④	
TOTAL	\$ _____	\$ _____	_____ ⑤

① Total of estimated construction costs for basic contract and previous changes, made at the time of negotiation of the basic contract or change. Do not revise even though later revised estimates or even construction award costs are available.

② Total of previously awarded design fees. Obtain from the contract file considering all changes to date.

③ Cannot exceed six percent.

④ Lost design effort or design breakage must be fully explained in the contract file. Do not use these lines if there are no lost design and no design breakage.

⑤ Cannot exceed six percent.

* Design fee is only those costs which go directly for the production of designs, drawings, plans and specifications, including construction cost estimate.

Exhibit 5-15

CLASSROOM EXERCISE CE-5.7

“THE REPORT CARD”

Time: 15 minutes for Preparation
10 minutes for Presentation

Method: Group Consensus

Instruction:

Students are to

- Read the completed SF 1421 which follows,
- Discuss the data provided on the form with their group, and then
- Complete blocks 13 and 14 of the SF1421.

The instructor will call upon the group spokesperson to give the group's overall rating in block 13 & recommendation in block 14 and group's rationale.

Be prepared to discuss and relate your own experiences with A-E Performance Evaluations.

PERFORMANCE EVALUATION (ARCHITECT-ENGINEER)				1. PROJECT NUMBER <i>P-165</i>	
				2. CONTRACT NUMBER <i>GR9-C-9x-0013</i>	
IMPORTANT: Be sure to complete Performance section on reverse. If additional space is necessary for any item, use Remarks section on reverse.					
3. TYPE OF REPORT (<i>Check one</i>) <input type="checkbox"/> INTERIM <input type="checkbox"/> COMPLETION OF DESIGN OR STUDY <input checked="" type="checkbox"/> COMPLETION OF CONSTRUCTION <input type="checkbox"/> TERMINATION			4. REPORT NUMBER <i>C-9x-0013</i>		5. DATE OF REPORT <i>March 7, 199x</i>
6. NAME AND ADDRESS OF CONTRACTOR <i>G. David Miller 6784 N. Harbor Los Angeles, CA</i>			7. PROJECT DESCRIPTION AND LOCATION <i>Cafeteria for Federal Building</i>		
8. OFFICE RESPONSIBLE FOR					
A. SELECTION OF CONTRACTOR <i>Design Division</i>		B. NEGOTIATION/AWARD OF CONTRACT <i>Contracts Division</i>		C. ADMINISTRATION OF CONTRACT <i>Region 9</i>	
9. CONTRACT DATA					
A. TYPE OF WORK <i>Design</i>			B. TYPE OF CONTRACT <input checked="" type="checkbox"/> FIXED-PRICE <input type="checkbox"/> OTHER (<i>Specify</i>) <input type="checkbox"/> COST-REIMBURSEMENT		
C. PROJECT COMPLEXITY <input type="checkbox"/> DIFFICULT <input checked="" type="checkbox"/> ROUTINE <input type="checkbox"/> SIMPLE		D. PROFESSIONAL SERVICES CONTRACT			
		INITIAL FEE <i>\$ 450,000</i>		TOTAL FEE <i>\$ 490,000</i>	
		AMENDMENTS NO. <i>2</i> AMOUNT <i>\$ 40,000</i>		CLAIMS BY CONTRACTOR NO. <i>N/A</i> AMOUNT <i>\$ N/A</i>	
E. DATE CONTRACT AWARDED <i>April 1, 199x</i>		F. CONTRACT COMPLETION DATE (<i>including extensions</i>) <i>May 20, 199x</i>		G. ACTUAL COMPLETION DATE OF CONTRACT <i>June 6, 199x</i>	
10. KEY CONSULTANT DATA					
A. NAMES <i>Mary Sampson Ed Martinez</i>		B. ADDRESS <i>Los Angeles, CA Burbank, CA</i>		C. SPECIALTY <i>Mech./ Elect. Interior Designer</i>	
11. CONSTRUCTION COSTS		A. INITIAL ESTIMATE <i>\$ 1,150,000</i>		B. AWARD <i>\$ 1,200,000</i>	
				C. ACTUAL <i>\$ 1,240,000</i>	
12. CONSTRUCTION CHANGES AND DEFICIENCIES		NUMBER		TOTAL	
A. CONSTRUCTION CHANGES		<i>2</i>		<i>\$ 40,000</i>	
B. CONSTRUCTION CHANGES RESULTING FROM DEFICIENCIES IN A-E PERFORMANCE		<i>None</i>		<i>\$</i>	
C. DEFICIENCIES PAID FOR BY A-E		<i>None</i>		<i>\$</i>	
D. DEFICIENCIES PAID FOR BY GOVERNMENT		<i>None</i>		<i>\$</i>	
13. OVERALL RATING <input type="checkbox"/> EXCELLENT <input type="checkbox"/> AVERAGE <input type="checkbox"/> POOR			14. RECOMMENDED FOR FUTURE CONTRACTS? <input type="checkbox"/> YES <input type="checkbox"/> NO (<i>If "NO," explain in REMARKS on reverse</i>)		
15A. NAME AND TITLE OF RATING OFFICIAL <i>John Smith, CE</i>			15A. NAME AND TITLE OF REVIEWING OFFICIAL <i>Helen Adams Construction Dept.</i>		
15B. SIGNATURE		15C. DATE		15C. DATE	

PERFORMANCE																
STAGES OF SERVICES (As applicable)					RATING FACTORS/RATINGS									RATED BY		
					NOT APPLICABLE	ACCURACY	COMPLETENESS	COOPERATION	COORDINATION	MANAGEMENT	MEETING SCHEDULE	PERSONNEL	ABILITY	WORK QUALITY	CODE LEGEND:	
															+	EXCELLENT
											A	AVERAGE				
											P	POOR				
											N/A	NOT APPLICABLE				
											NI	NO INFORMATION				
SIGNATURE AND DATE																
CONCEPTS	SCHEDULE (Mo., day, yr.)	FROM	TO	ARCH.												
				STRU.												
	ACTUAL (Mo., day, yr.)	FROM	TO	MECH.												
				ELEC.												
TENTATIVES	SCHEDULE (Mo., day, yr.)	FROM	TO	ARCH.		P	P	P	P	P	P	A	P	Amy Kim		
				STRU.		P	P	P	P	P	P	A	P	Amy Kim		
	ACTUAL (Mo., day, yr.)	FROM	TO	MECH.												
				ELEC.												
WORKING DRAWINGS	SCHEDULE (Mo., day, yr.)	FROM	TO	ARCH.		P	P	P	P	A	A	A	A	Amy Kim		
				STRUC.		P	P	P	P	A	A	A	A	Amy Kim		
	ACTUAL (Mo., day, yr.)	FROM	TO	MECH.		P	P	P	A	A	A	A	A	Amy Kim		
				ELEC.		P	P	P	A	A	P	A	A	Amy Kim		
ESTIMATES				A/S		P	P	P	P	P	P	A	P	Amy Kim		
				M/E		P	P	P	P	P	P	A	P	Amy Kim		
CRITICAL PATH METHOD				PRE-AWARD												
				POST-AWARD												
POST CONSTRUCTION CONTRACT SERVICES				SHOP DWGS		A	A	A	A	A	A	A	A	Helen Adams		
				MANUALS												
INSPECTION				FIELD		A	A	A	A	A	A	A	A	Helen Adams		
				OFFICE												
SOLICITATION DOCUMENTS																
REMARKS <p><i>This is firm's second Government contract, and they have shown only slight improvement (shop drawings are better). Cost estimates on the change orders were not realistic (although the required changes were not the fault of the A-E). Contractor's personnel do seem to have the ability to perform.</i></p>																

CHAPTER 5 VIEWGRAPHS

CONSTRUCTIBILITY

Ease with which a Designed
Project can be Built.

BIDDABILITY

Ease with which the Contract
Documents can be Understood, Bid,
Administered, and Enforced.

VG 5-1

DESIGN REVIEW

- Site Conditions and Restrictions
 - Adaptations thereto
- Sequence of Work
- Allowance for Space & Access
- Clarity & Consistency of Specs
- Project Configuration/Design Features
- Economic Considerations

VG 5-2

SPECIAL REVIEWS	
REVIEW	CONSISTS OF
<ul style="list-style-type: none"> • ARCHITECTURAL • INTERIOR DESIGN • ARCH. BARRIERS • UTILITIES • REAL ESTATE • ENVIRONMENTAL • FIRE PROTECTION • INDUSTRY HYGIENE 	<p>Visual or environmental effects.</p> <p>Walls, ceilings, floor construction</p> <p>Physically handicapped.</p> <p>Availability and types.</p> <p>Assurance that all rights, permits have been obtained.</p> <p>A-E provides all permits required by the design manual.</p> <p>Assures there no fire hazards, and all codes are met.</p> <p>Identify potential health hazards.</p>

VG 5-3

PURSUING A-E LIABILITY	
STEP 1:	Establish that problem is a design error or omission.
STEP 2:	Determine if it was the A-E's failure to meet professional standards <i>or</i> a breach of contract.
STEP 3:	Determine if Government has suffered damages and what the dollar value is.

VG 5-4

CLAIMS & CHANGE ORDERS

- STEP 1:** Identify claim or change order.
- STEP 2:** Analyze delay time and cost.
- STEP 3:** Prepare and assemble systematic and accurate documentation.
- STEP 4:** Perform costs analysis and conduct negotiations.

VG 5-5

ADMINISTRATIVE RECORD

- Confirm Phone Calls by Written Memo.
- Log All inquiries and Phone Calls.
- Periodically Review the Records.
- Correct or Rebut any Discrepancies in Writing.
- Stay on Top of the Project.

VG 5-6